

BATTLETECH

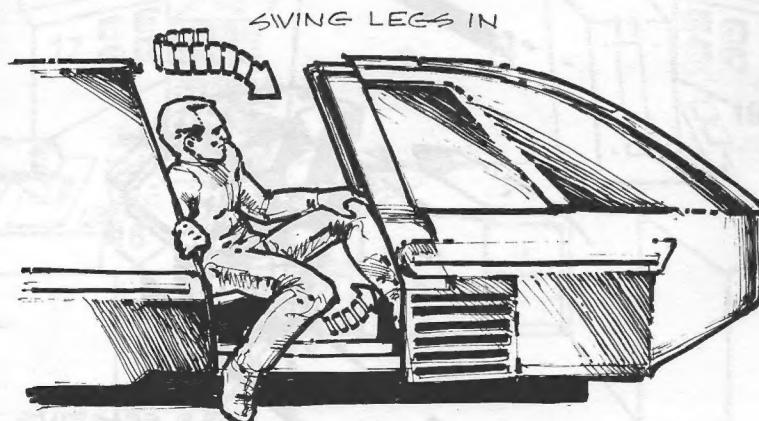
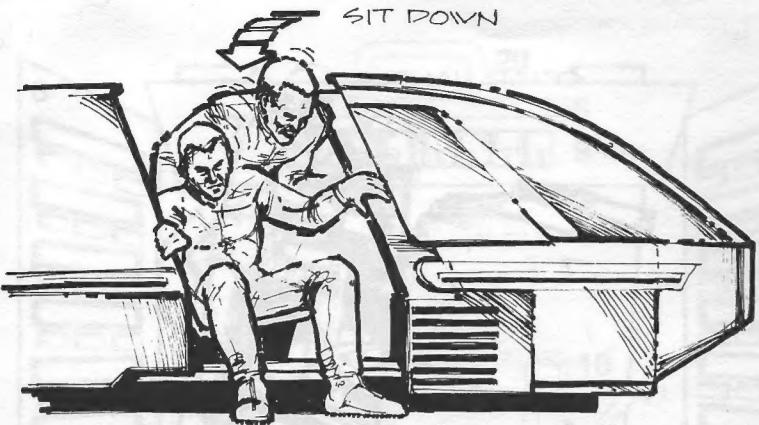
CENTER

BATTLEMECH

15

3

OPERATIONS • MANUAL



ENTERING THE COCKPIT (METHOD A)

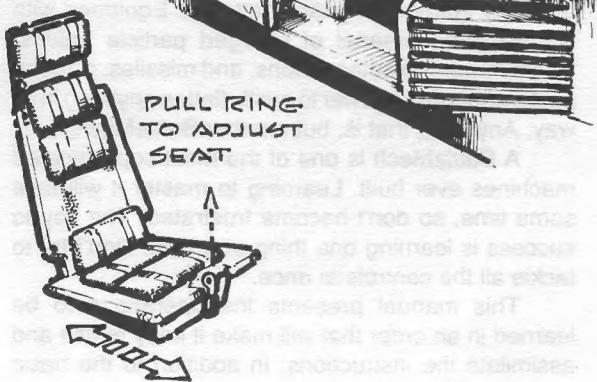
INTRODUCTION

The battlefields of the 31st century are dominated by BattleMechs, the most powerful war machines ever built. Standing ten to twelve meters tall, the typical 'Mech is humanoid in shape, an armored giant of myth and legend come to life. The lightest 'Mechs weigh 20 tons, the heavies 75 tons or more. Developed more than 500 years ago during the so-called Age of War, these huge vehicles are faster, more mobile, better-armored, and more heavily armed than any 20th-century tank battalion. Equipped with an awesome arsenal of charged particle beams, lasers, rapid-fire autocannons, and missiles, a 'Mech packs enough firepower to easily flatten anything in its way. Anything, that is, but another BattleMech.

A BattleMech is one of the most sophisticated machines ever built. Learning to master it will take some time, so don't become frustrated. The key to success is learning one thing at a time. Don't try to tackle all the controls at once.

This manual presents the operations to be learned in an order that will make it easy to use and assimilate the instructions. In addition to the basic operations, some sections also contain advanced options. Use only the basic mode until you are familiar with ALL the basic modes. Then go back and start to use the advanced modes.

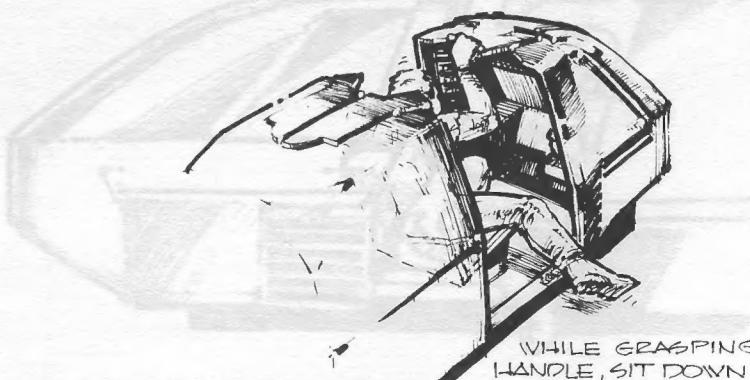
ENTRY/EXIT



GRASP HANDLE



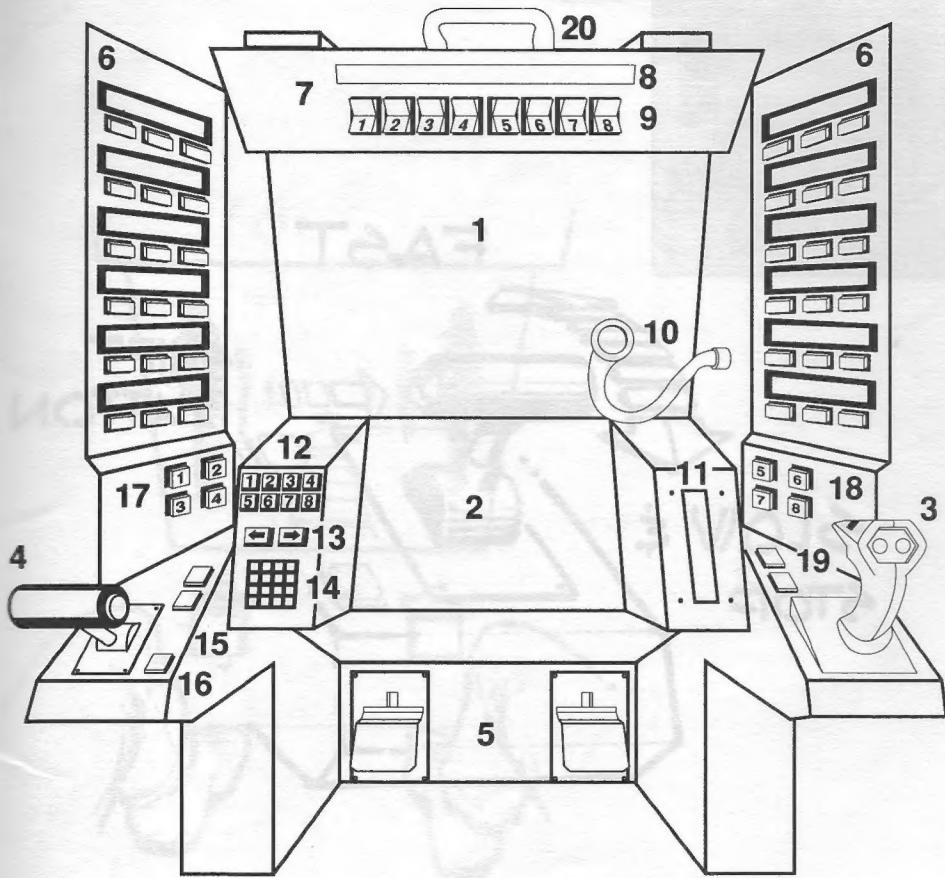
STEP INTO POD



CLOSING COCKPIT & ADJUSTING SEAT

ENTERING THE COCKPIT (METHOD B)

COCKPIT CONTROLS



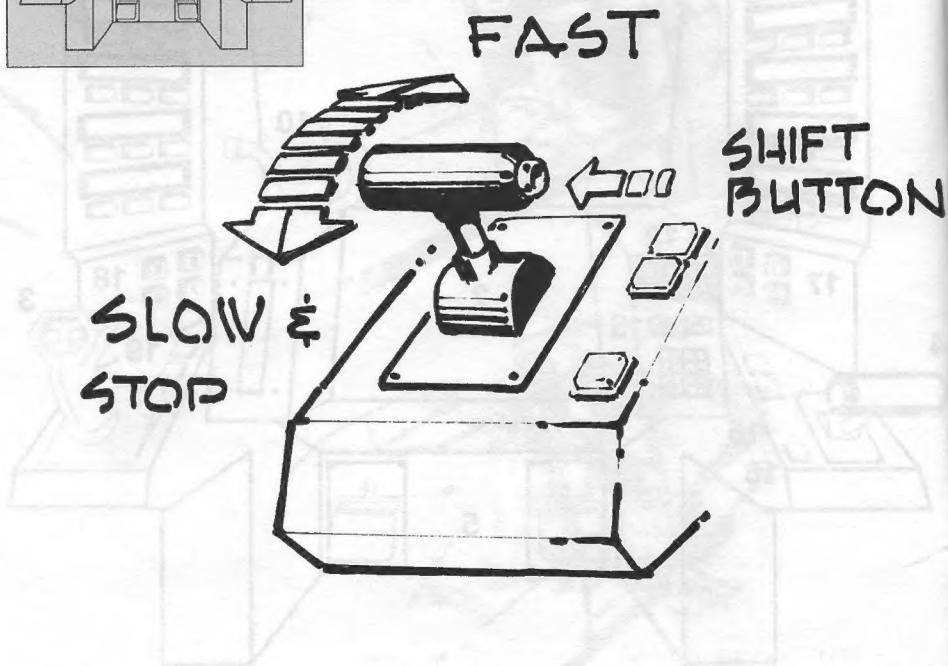
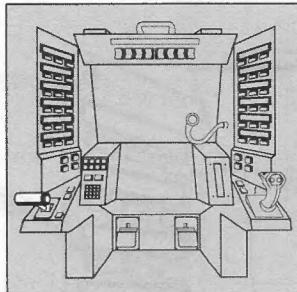
- 1) Primary Screen (Front Window)
- 2) Secondary Screen (On Board computer)
- 3) Weapons Joystick
- 4) Throttle
- 5) Foot Pedals
- 6) Weapon Displays
- 7) Overhead Console
- 8) On Board Computer Message Center
- 9) Enable/Disable Rocker Switches
- 10) Radio Microphone
- 11) Heat Scale
- 12) Secondary Screen Controls
- 13) Torso Rotation Controls
- 14) On Board Computer Input Key-pad
- 15) Radio Channel Controls
- 16) Radio Push toTalk Button
- 17) Advanced Controls Buttons 1 thru 4
- 18) Advanced Controls Buttons 5 thru 8
- 19) Additional Advanced Controls
- 20) Entrance/Egress Handle

THROTTLE

You control your BattleMech's speed by varying the position of the throttle. When the throttle is pushed all the way up, your 'Mech will run forward at maximum speed. To come to a complete stop, pull the throttle all the way down.

Your 'Mech weighs about 80 tons, which gives it enormous momentum when in motion. Don't expect it to immediately come to a screeching halt when you move the throttle. It takes time for the 'Mech to speed up and slow down.

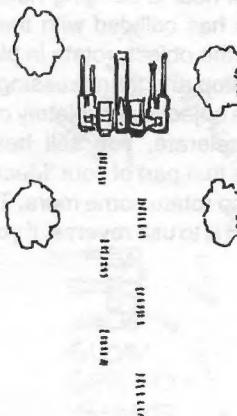
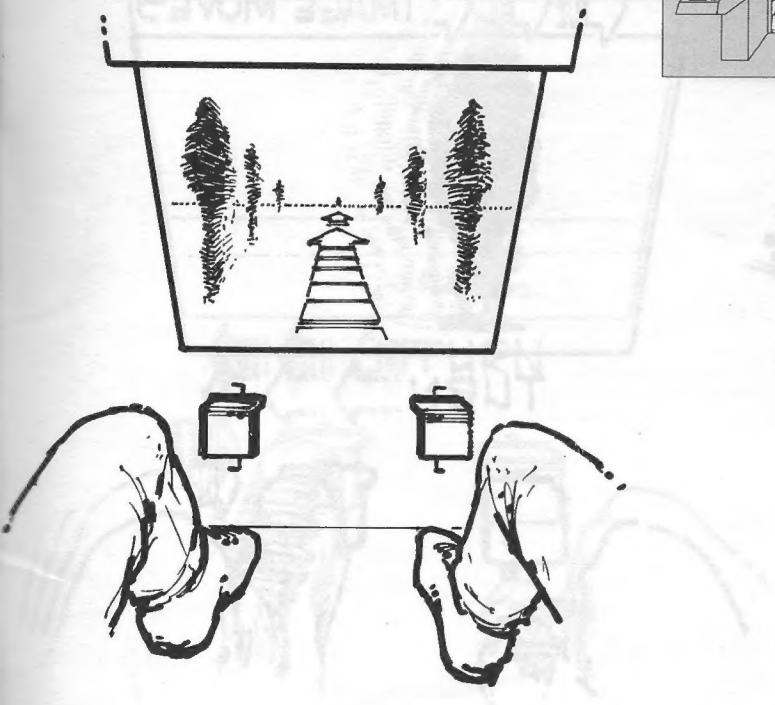
Once you're comfortable using forward gear, try making your 'Mech walk in reverse. First, enable the reverse feature using **Rocker Switch 2** on the **Overhead Console**, which only needs to be done once. Next, pull the throttle down to the Stop position, then press the red **Shift Button** on the side of the throttle. That shifts the 'Mech into reverse. Now accelerate to get moving. To go forward again, bring the throttle to the Stop position, hit the **Shift Button**, and then accelerate. Anytime you want to change the direction your 'Mech is moving, bring the Throttle to Stop, and then hit the **Shift Button**. There is no need to hit the Rocker Switch again, unless you wish to disable the **Shift Button**. You can also use Reverse as a brake to reduce speed even faster than Stop.



STEERING: STRAIGHT

Using the foot pedals, you steer your 'Mech with your feet. To turn, apply pressure with your foot in the direction you wish to turn. Steering with your feet leaves your hands free for weapons fire.

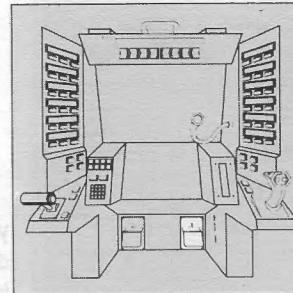
On the floor in the forward area of your cockpit, you'll find a pair of foot pedals, a right pedal and a left pedal. To keep the 'Mech moving straight, keep both feet **off** the pedals.



STEERING: RIGHT TURN

To turn the 'Mech to the right, press down on the right pedal.

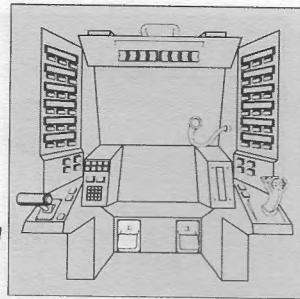
As you encounter objects that cannot be walked through, such as the large rock out-croppings or the small boulders, you will have to steer around them. To do this, use the foot pedals as described to move the objects off the right or left side of your **Primary Screen**. If an object leaves your screen off the bottom center, you will hear a banging noise that tells you that the 'Mech has collided with the object. To get your 'Mech off the object, rotate in place by bringing the throttle to stop and then pressing one of the foot pedals until the object is completely off the screen. If, when you accelerate, you still hear the banging noise, it means that part of your 'Mech is still hung up on the object, so rotate some more. The other way to get off an object is to use reverse, if you have enabled it.



← ← ← **IMAGE MOVES**



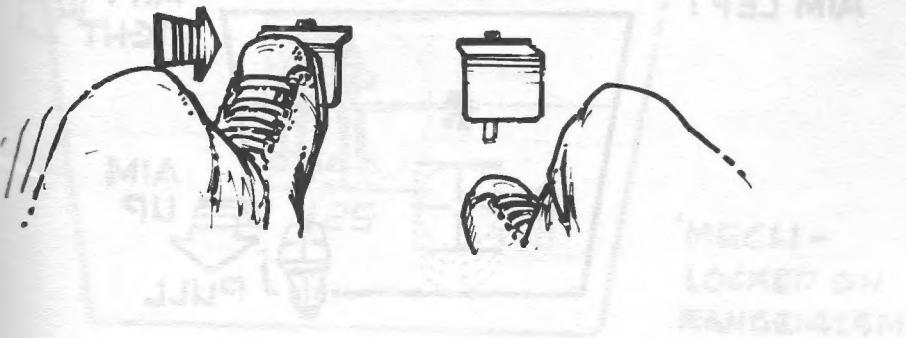
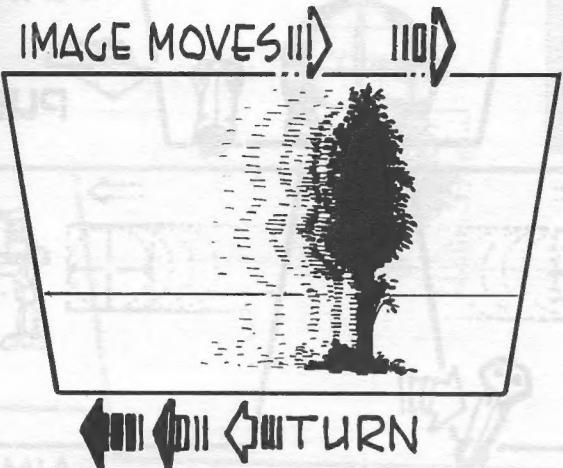
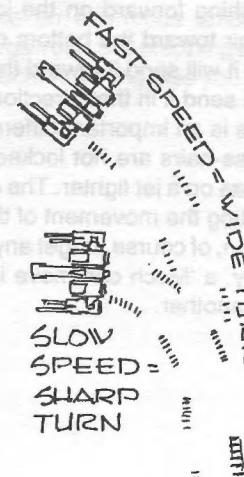
STEERING: LEFT TURN



To turn the 'Mech to the left, press down on the left pedal.

It is important to remember that the faster your 'Mech is moving, the wider a turn it's going to make. If you're moving slowly, or stopped completely, your 'Mech will turn much faster.

**Remember,
if you need to turn quickly, slow down.**



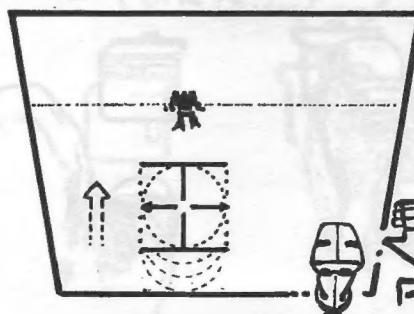
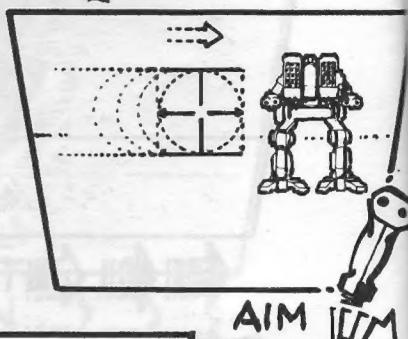
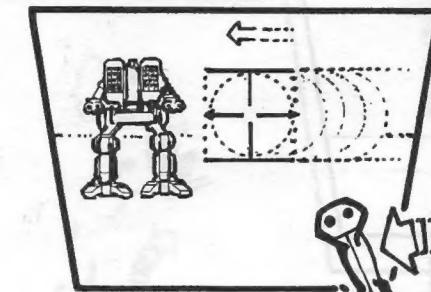
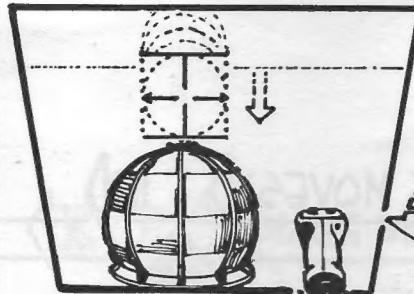
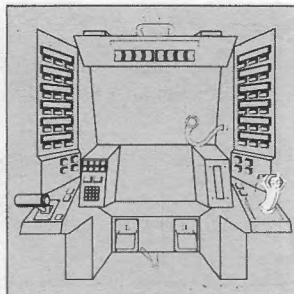
CROSS-HAIR MOVEMENT

Piloting your 'Mech is one thing, but if you want to win you've got to know how to fight. There are two stages to using your weapons, aiming and firing. Aiming takes all the brains, firing is just a reflex.

To aim, first jockey your 'Mech into position using your foot pedals. Once you've got the enemy roughly in the area of you targeting cross-hair, use your joystick, found on the right side of your cockpit, to fine tune your aim.

Pushing forward on the joystick will move the cross-hair toward the bottom of the screen. Pulling back on it will send it toward the top. Pushing left or right will send it in that direction.

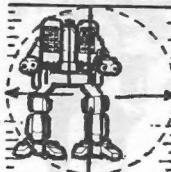
This is an important difference in BattleMechs. The cross-hairs are not locked to the center of the screen, as on a jet fighter. The cross-hair movement is reflecting the movement of the arms of the Mech, which can, of course, target any object that is visible. This way, a 'Mech can move in one direction while firing in another.



TARGET ACQUIRED

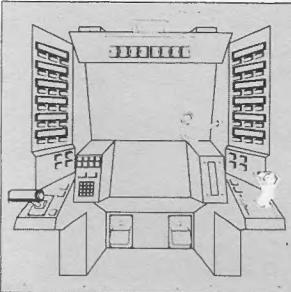
When you've centered the cross-hairs on a 'Mech, a set of numbers will appear just under the cross-hairs. These numbers tell you the range in meters to your target, and verify that your weapons are locked on the target. Do not fire unless you've got those numbers, you'll just miss and waste your shot. You'll only see those numbers if your target is a 'Mech. If it's anything else, just line the cross-hair up and shoot by sight.

A 'Mech carries an enormous amount of fire power. Only the large rock out-croppings can withstand fire from a 'Mech. Anything else you encounter can be destroyed.



425

'MECH -
LOCKED ON
RANGE:425M



WEAPON DISPLAYS

The 'Mech's weapon displays on the left and right sides of your cockpit correspond to the side of your 'Mech the weapon is mounted on.

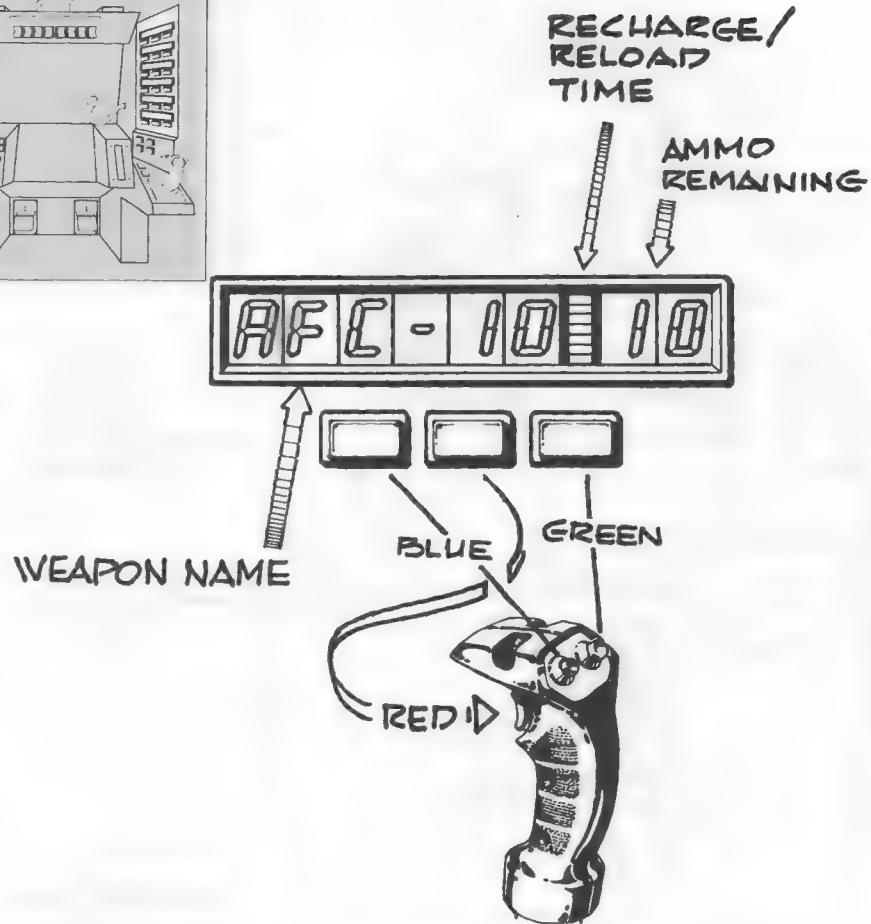
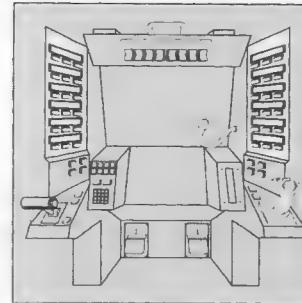
Below each weapon display are three colored buttons; red, blue, and green. One of those buttons will be lit up. That tells you which of the similarly colored buttons on your targeting joystick will fire that weapon. So, if the green button is illuminated, you press the green button on the joystick to fire it.

Weapons that have been fired can't immediately be fired again, they have to recycle either by reloading their ammo or recharging their energy banks if they're an energy weapon.

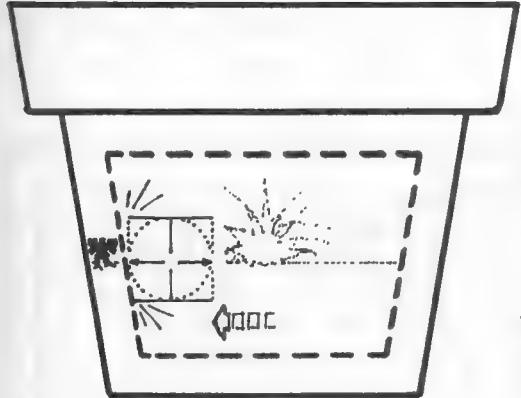
When a weapon is fired, the bar graph display associated with it will go dark. As the weapon recycles the display will light up again. Once it becomes fully lit, the weapon can be fired.

Some weapons recycle faster than others. Generally speaking, the more powerful the weapon the longer it takes to recycle.

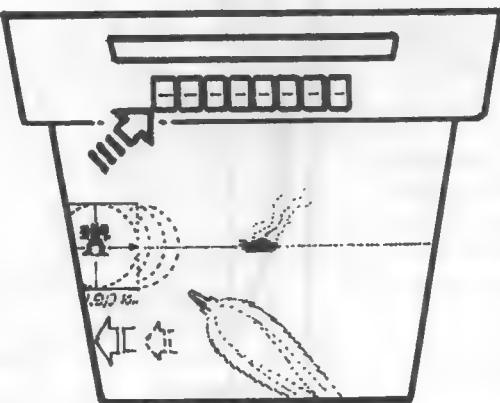
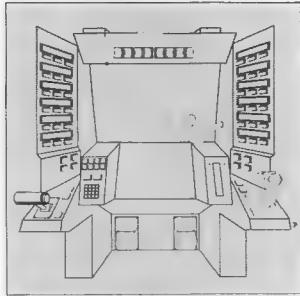
Some weapons use ammunition. Once you use up the ammo you're carrying, the weapon is useless. The number of shots you have remaining with each weapon is indicated on the display next to the weapon. Keep track of it.



CROSS-HAIR-LIMIT WINDOW



WINDOW
ENGAGED



WINDOW
DISENGAGED

You'll notice that your cross-hairs are restricted to the center area of your view screen. Once you've gotten comfortable with aiming and firing you can disengage that restriction by hitting the **Rocker Switch 1** on the **Overhead Console**. This will allow the cross-hairs to reach the edges of the view screen. But be careful, it also makes the cross-hair easier to lose track of.

SECONDARY SCREENS: SHORT RANGE SCANNERS

The BattleMech's on board computer, located below the **Primary Screen**, is used to display information about your environment, and your 'Mech's status.

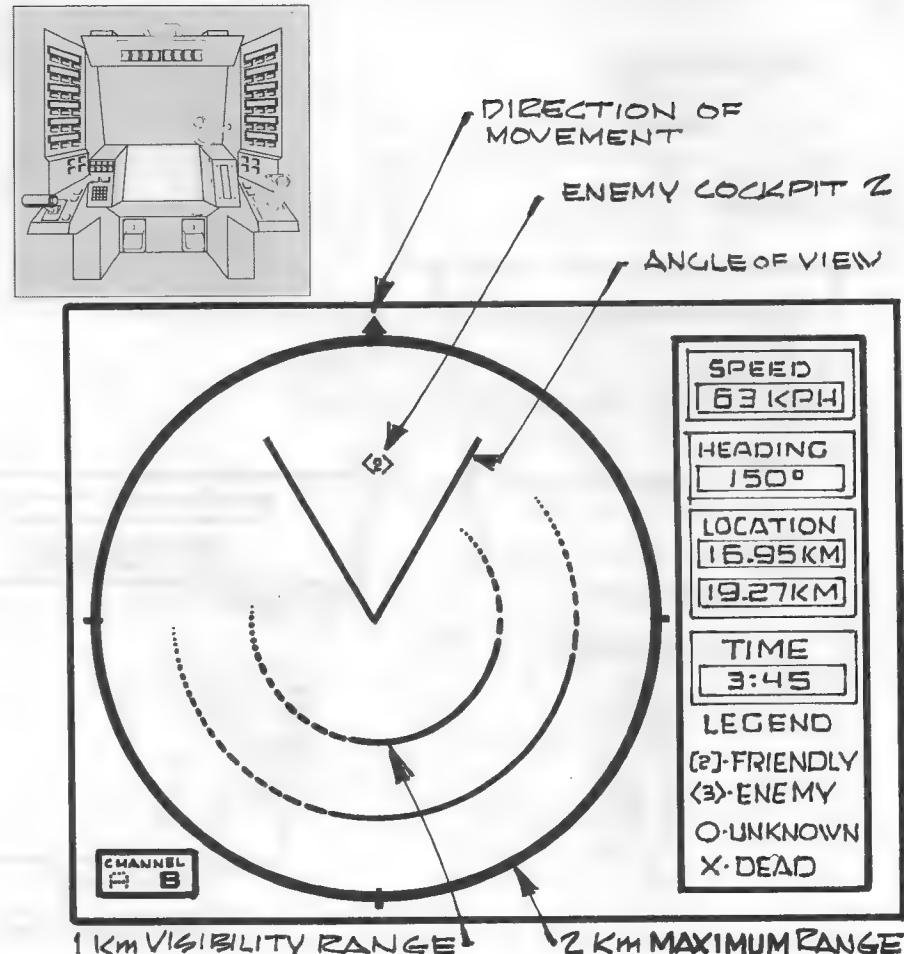
The group of yellow buttons found just to the left of the screen selects which information the computer displays.

Button number 1 selects the Short-Range Scanner. Your 'Mech, while not shown, is located at the center of the scanner sweep circle. An arrow at the edge of the circle will indicate the direction you are moving in. If any of your teammates are close enough to you to be seen by the short range scanner, they will appear in blue on the screen.

Your opponents' BattleMechs will all appear in a tan color. Every 'Mech within your scanner's range is represented by a number, the same number that appears on the side of their Cockpit Pod. If your Mech's on-board computer cannot identify a vehicle, it will label it with a yellow circle.

The screen also shows a yellow angle-of-view indicator. This corresponds to the view that you see on your **Primary Screen**.

If a target falls within the yellow lines, and within the inner most circle on the scanner, you should be able to see it on the primary screen.

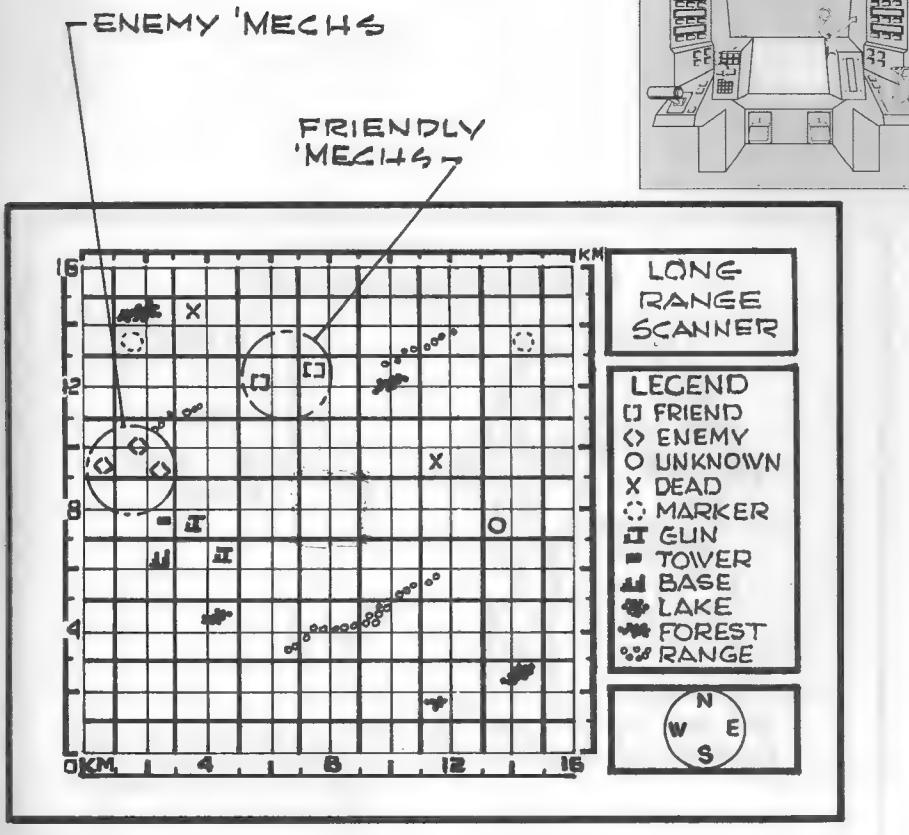


SECONDARY SCREENS: LONG RANGE SCANNERS

Button number 2 selects the Long-Range Scanner. This shows you an augmented satellite view of the battle area. On the map you'll be able to see the predominant terrain features, and the position of allied and enemy BattleMechs.

You will always appear as a blue arrow on the display. To navigate, steer your 'Mech until the arrow is pointing in the direction you want to go.

The grid lines can be used to communicate the location of objects to your team mates over the radio. Your 'Mech's current grid coordinates are given on the **Short-Range Scanner** screen.

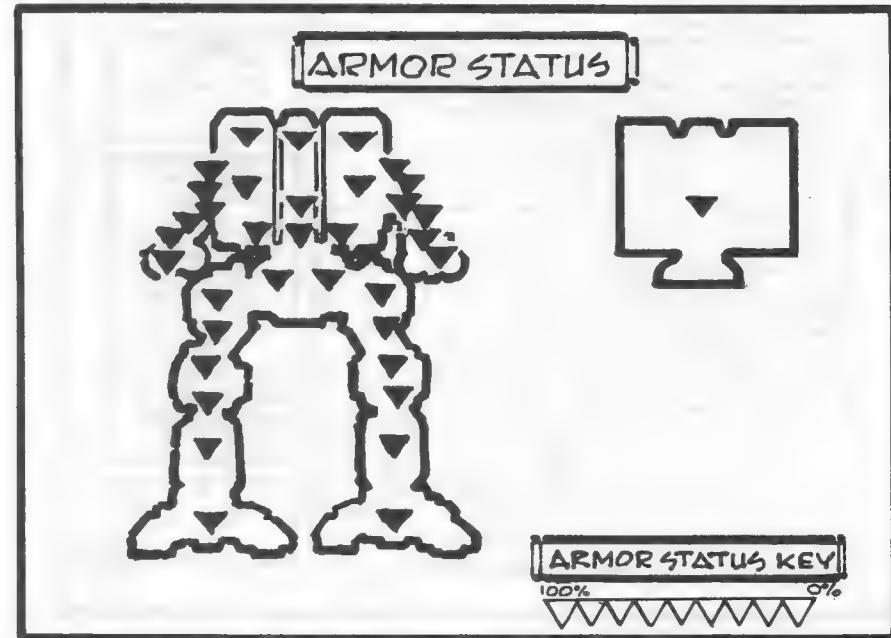
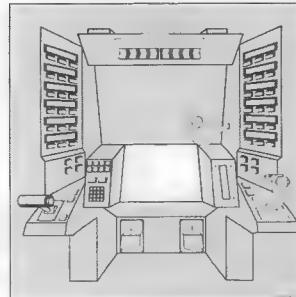


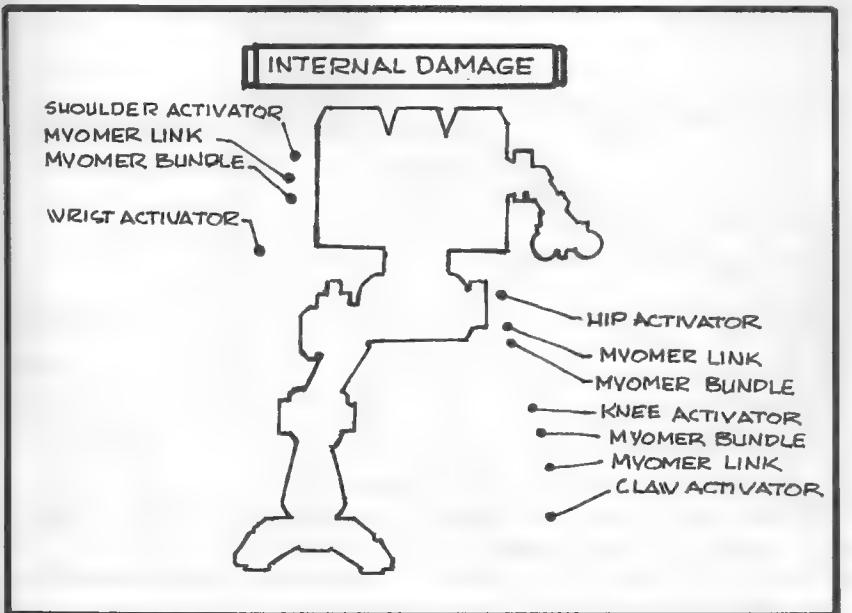
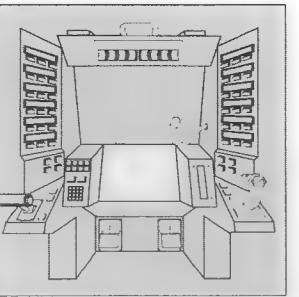
SECONDARY SCREENS: ARMOR STATUS

Button 3 calls up your **Armor Status** screen, which tells you how well your 'Mech's armor is holding up. The scale shows the relative condition of each section of armor, with green indicating relatively undamaged armor and red signifying heavy damage. When a body section starts flashing, it means that another hit or two will pierce the armor and your 'Mech will start taking serious internal damage.

If the section disappears completely, it has been blown off. All weapons in that section are destroyed. If your 'Mech has lost its head, torso, or both legs, it has been destroyed. The **Armor Status** screen is used to help you identify injured areas so that you can try to keep them away from enemy fire.

You can get an idea of how damaged your opponents are by looking at them on the **Primary Screen**. As an area takes damage, it gets darker, eventually turning black. If you concentrate your fire on such an area, the odds of blowing it off are much better.





SECONDARY SCREENS: INTERNAL DAMAGE

Button number 4 shows your Internal Damage display. This is a record of damage that has gotten past your armor and damaged your 'Mech's internal systems. The more internal damage you take, the harder it will get to operate your 'Mech.

Each internal component that has been destroyed will hamper your 'Mech. Lost actuators make movement and fire harder. Lost heat sinks eventually reduce your fire capabilities. And, of course, if a weapon is destroyed it cannot be used. Destroyed weapons are not displayed on the Internal Damage display, but rather at the specific weapon's L.E.D. display on the right or left sides of the cockpit. If the name of the weapon disappears and is replaced with dashes, the weapon is useless.

The last two buttons, 7 and 8, call up help screens that you can refer to if you ever forget where some of the controls are positioned.

Also, if you don't know what one of the buttons or controls does, don't play with it. You may activate something you'll later regret."

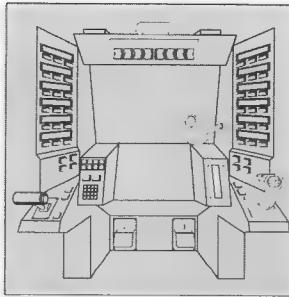
HEAT SCALE

Every weapon generates heat, the more powerful the weapon the more heat it generates. Your Battlemech is able to dissipate a certain amount of heat, but if it gets too hot you're going to have problems.

Once your 'Mech becomes overheated there's nothing you can do except wait to cool down. If you're so hot that the on-board computer locks your weapons out, then you had better hope your opponent a is bad shot.

All Heat Warnings will appear on the center **Overhead Console** near the rocker switches.

If you really want to push your 'Mech to the limit, you can disable the on-board computers weapon lock out system. To do this flip **Rocker Switch 5** on the **Over-head Console**. This now makes you responsible for managing your 'Mech's heat. As the heat climbs to critical levels, the 'Mech will start to slow down and the cross-hairs will get erratic. If the heat continues to build the fusion plant's magnetic sphere will start to overheat and its computer will try to shut the engine down. You have one chance to avoid shutdown by typing in the **Shut Down Avoid Code**. The code will be given on the **Overhead Console** and you must type it into the **On board Computer's Keypad**, exactly correct. As the heat

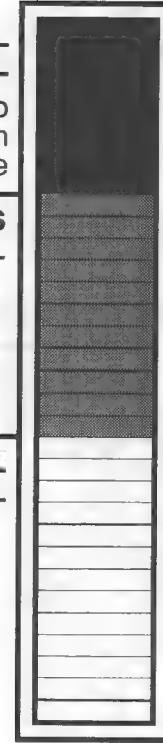


CRITICAL HEAT LEVEL

Ammo
Explosion
Possible

DANGEROUS HEAT LEVEL

NORMAL HEAT LEVEL



Automatic Shutdown

Cross-hair flicker 70%
Speed cut by 75%

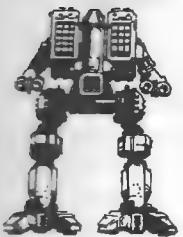
Cross-hair Flicker 50%
Speed cut by 50%

Cross-hair Flicker 30%

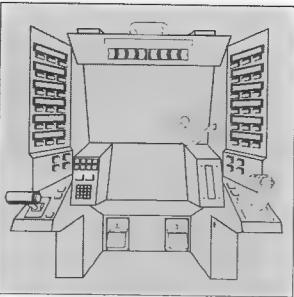
Speed cut by 25%

level gets higher, your amount of time to respond gets shorter. If you fail, or the heat scale hits the top, the 'Mech will shut down. Now you're a sitting duck that can't move or fire, and you just gave your enemies a hunting licence.

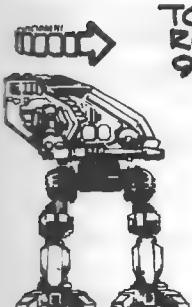
Heat management is one of the most important jobs a good Mechwarrior does. If have a very heavy trigger finger, always taking low probability shots, you will often get caught with your heat sky high and your weapons reloading when that do or die shot is needed.



CENTER
FORWARD
ORIENTATION

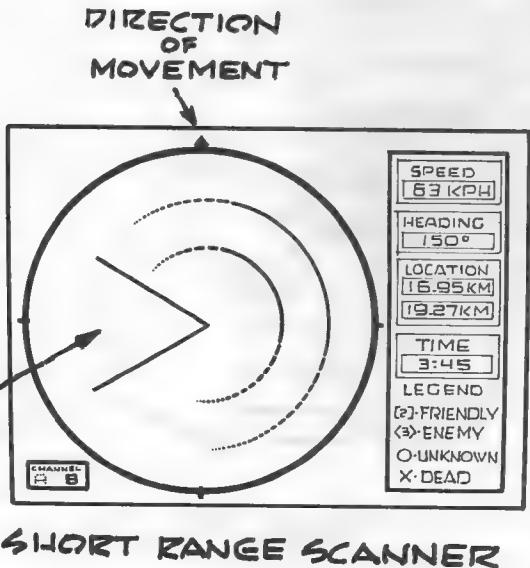


TORSO ROTATION



TORSO
ROTATED
90° LEFT

ANGLE OF
VIEW -
ROTATED
90° LEFT



SHORT RANGE SCANNER

To rotate the upper torso of your 'Mech independent from the rest of its body, you must first enable this feature using **Rocker Switch 3** on the **Overhead Console**.

The controls for rotation are a pair of red buttons located to the left of the secondary screen, just above the small keypad.

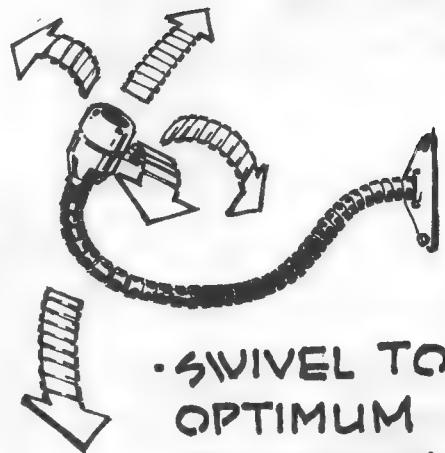
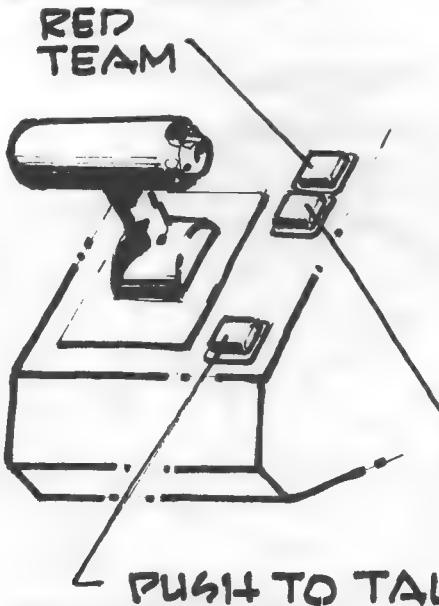
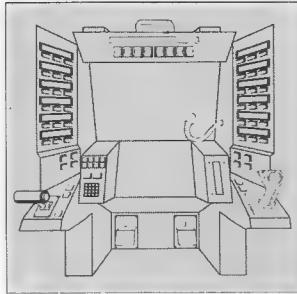
Pressing down on the left button will make your 'Mech's torso rotate to the left. Pressing down on the right button will make it rotate to the right. As long as you hold either button down, the 'Mech will continue to rotate in that direction, but you must hold the button down. If you press both buttons down simultaneously the torso will reorient itself to its centered forward position.

This means, it is possible to rotate your 'Mech's torso so that it is effectively facing in the opposite direction from the way you're moving. It's facing your rear while the Mech moves forward.

The only way to tell which direction your torso is facing relative to the rest of your body is to check the **Short-Range Scanner** display. The Direction Arrow always shows your direction of movement, while the yellow angle of view indicator shows which direction your torso is facing. The view on your **Primary Screen** is always from the direction your torso is facing.

RADIO OPERATION

While in the field, you'll need to communicate with your teammates in order to coordinate your actions. Your cockpit has a swivel microphone mounted on the right side. To use it, press the blue button to the right of the throttle. Hold it down while you transmit, and then release it to hear your teammate's response. Don't fill the airwaves with useless chatter, however. Remember, only one person can talk at a time, so while you're singing songs, your teammate's call for help goes unheard.



GREEN
TEAM

PUSH TO TALK

• SWIVEL TO
OPTIMUM
POSITION -

CONTROL LOCATIONS

Over-Head Display

Blue = Basic/ Red=Advanced)

- 1) Cross-Hair Limit Window Enable/Disable
- 2) Reverse/Forward Shift Enable/Disable
- 3) Torso Rotation Enable/Disable
- 4) Weapon Display Select Enable/Disable
- 5) Heat Over-ride Enable/Disable
- 6) Advanced Operations Enable/Disable
- 7) Use Classified
- 8) Reset all Controls to Basic Operations/ Enable all Advanced Controls

Secondary Screen Selectors

- 1) Short Range Scanners
- 2) Long Range Scanners
- 3) Armor Status
- 4) Internal Damage
- 5) L.R.M. Indirect Fire
- 6) Enemy Radio Descrambler
- 7) Use Classified- 8) Help screen

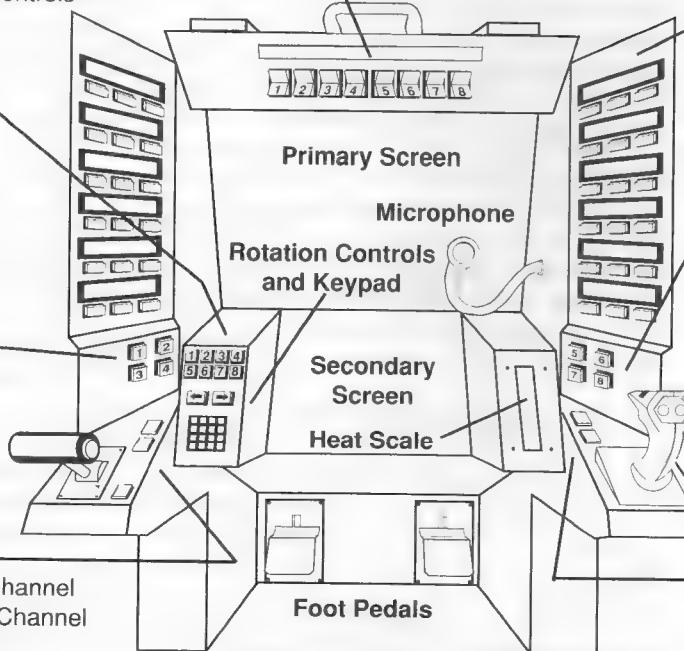
Advanced Operations Controls

- 1) Scanners On/Off
- 2) I. F.F. System On/Off
- 3) Search Light On/Off
- 4) I.R. Imaging On/Off

Throttle and Shift Switch

Radio Controls

- 1) (Red) Red Teams Radio Channel
- 2) (Green) Green Teams Radio Channel
- 3) (Blue) Push To Talk Button



Weapon Displays

Advanced Operations Controls

- 5) Use Classified
- 6) Use Classified
- 7) Use Classified
- 8) Use Classified

Joystick

Joystick Console Expansion Controls

- 1) (Yellow) Use Classified
- 2) (Blue) Use Classified

ADVANCED CONTROLS

Several of the Advanced Controls have already been discussed in the sections where they are logical extensions of the Basic Controls. This includes: the Cross-hair Limit Window; Reverse; Torso Rotation; and Heat Controls. All these should be considered Advanced and you should only start using them when you feel comfortable with the Basic Controls.

As you have noticed, all the Advanced Controls are locked out from use when you first enter the cockpit. This is the Basic Operations mode for the BattleMech. You must enable each of the Advanced Controls when you are ready to use them. All the enable switches are located on the Overhead **Console**. If the **Blue Light** is on, then the function is in Basic Mode; if the **Red Light** is on, the function is in Advanced Mode. If at anytime you want to switch a particular Advanced function back to Basic mode, just switch the appropriate rocker switch back to its **Blue Light** side.

Rocker Switch 8 is used if you want to enable all the Advanced functions at once. It is also used if you want to reset the entire cockpit back to Basic Mode.

WEAPON DISPLAYS

As you have read in the Basic Mode description the Weapon Displays give you an enormous amount of valuable information. In the Advanced Mode you can change how your weapons are assigned to the **Joystick** fire buttons. For example, if in Basic Mode if a weapon has a green light under it, it will be fired by the green fire trigger on the joystick. In Advanced Mode, you can change this by pressing the green light switch to turn it off, and then pressing the red or blue to turn it on. You have just switched which trigger will fire that weapon. You can assign as many weapons to a trigger as you like, but remember that firing everything at once will shoot your heat way up.

IDENTIFY FRIEND OR FOE SYSTEM

Known as the IFF system, this is what allows your computer to display a 'Mech as friendly or enemy on your scanner screens. If you turn it off, then all the icons on your screens become unknown, and you will show up as an unknown on everyone else's screen.

The IFF system also guarantees that no friendly missiles will accidentally hit you.

THE SEARCH LIGHT

The Search Light is actually an active emitter that will brighten objects in front of you at night. The emitter sends off radiation that only your 'Mech can see, so you don't make a huge beacon of yourself. Only the base of the Search Light itself glows white, which is enough of a liability at night.

SCANNER SYSTEM

The BattleMech's Long and Short Range Scanners provide it with information about the outside world. Unfortunately, they also act as a beacon to tell the outside world where you are. This has always been the problem with radar-type scanning devices.

In Basic Mode your scanners are on all the time. In Advanced Mode you can use passive detection by turning your Scanner off. This means that you are no longer broadcasting scanner beams, and thus you cannot be picked up as easily by other 'Mechs' scanners. But it also means that you will not get as much information about other 'Mechs' locations.

The following table shows passive versus active Scanners.

ADVANCED CONTROLS

What **YOU** will see on your **Long Range Scanners**

	<u>Enemy with Scanner</u>	<u>Enemy w/o Scanner</u>
Your Mech with Scanner	Mech Icon on screen	Not Visible
Your Mech w/o Scanner	No Mechs Icons appear	No Mechs Icons appear

What **YOU** will see on your **Short Range Scanners**

	<u>Enemy with Scanner</u>	<u>Enemy w/o Scanner</u>
Your Mech with Scanner	Mech Icon within 2km	Mech Icon within 1km
Your Mech w/o Scanner	Mech Icon within 1km	No Mech Icons appear

When a 'Mechs camouflage makes it blend into the background, or normal visibility is low due to fog or night, the Infra-Red imaging system may allow you to see objects clearer. When the IR system is turned on it replaces the normal **Primary Screen**.

The IR system shows all the relative heat levels of the surrounding terrain and objects. Black representing the coldest and the hottest showing as bright green. When a 'Mech is running real hot or is damaged, there is nothing hotter on the planet, so he should be easy to see. But if the Mechwarrior has kept his heat down it may take some looking to figure out where he is. Learning to read the IR screen takes time, but it can become a very important tool.

The IR system is a strong active emitter that senses for heat concentrations. Since it is an emitter it will show up on the other 'Mechs Scanner Screens, even if your Scanners are off. So if you are using the Infra-Red imaging system be aware that you are appearing on everyone elses **Long Range Scanner** and their **Short Range Scanner**, if you are within 2 kilometers of them.

INFRA-RED IMAGING SYSTEM

The normal **Primary Screen** imaging system uses white-light, computer-enhanced cameras to create your "out the front window"

display. A real window on a 'Mech is like a screen door on a submarine, a quick way to die. All input is through the computer system.

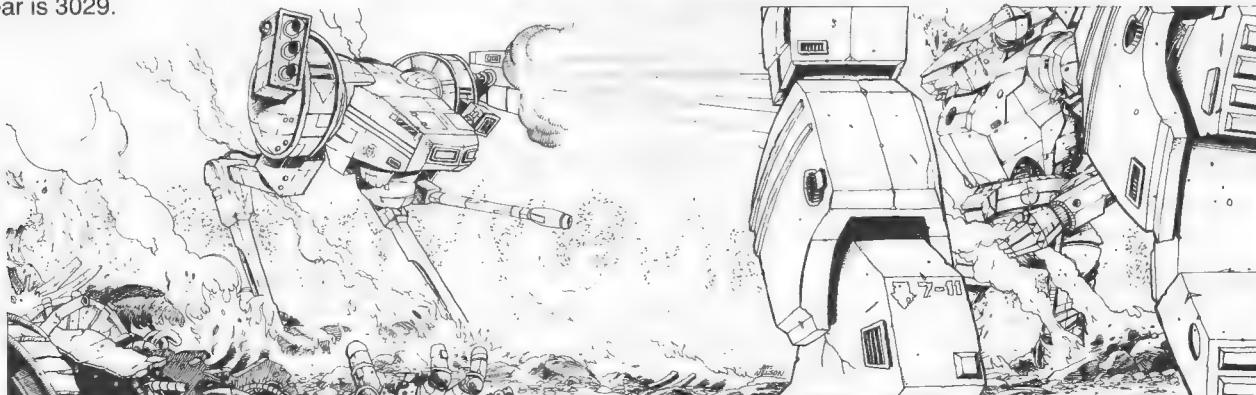
THE YEAR IS 3029

Echoes of war serve well the reflection of history, the prophecy of fate. Such is the curse of mankind; as true and unforgiving now as it was in ages long since past. Man has fulfilled his dream and colonized the stars, yet the expanse of the universe has given him only more opportunity for conquest and betrayal, for treachery and defeat. The wealth and promise of a unified Star League has been shattered. War between worlds rages on, and the ideals of both technology and brotherhood have been forever changed.

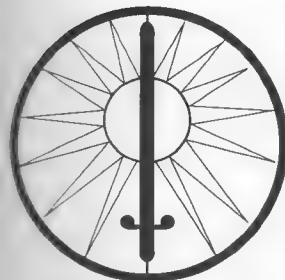
The year is 3029.

A Dark Age has engulfed the Human Sphere, the result of more than two centuries of bitter and endless war. Where once a united Star League ruled the stars, five splintered Successor States now struggle for dominion. In their wars, each House, or star empire, seeks mastery and control over a unified universe, but none can conquer unaided, and none can be trusted as an ally. Thus campaign succeeds campaign and battle follows battle—all without lasting victory or telling defeat. Men die and worlds are smashed, but the wars go ever on.

Five separate empires, each ruled by single family that has reigned over their hundreds of worlds for hundreds of years. Each controls vast resources, countless people, a near limitless possibilities. Yet they are all responsible for the many planets now laying ruins, desolate wastelands that stand as mutual condemnation of the five Successor Lords' inability to coexist peacefully.

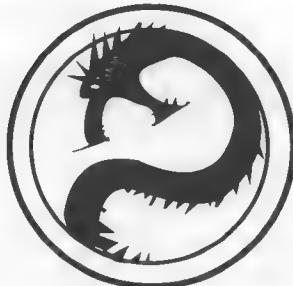


THE FIVE HOUSES



HOUSE DAVION
The Federated Suns

The Federated Suns is ruled by Hanse Davion who has earned the nick name "The Fox" for his brilliant and often deadly politics as well as his military campaigns. House Davion is perceived as the most powerful of the houses.



HOUSE KURITA
The Draconis Combine

Ruled by Takashi Kurita, The Draconis Combine is the Inner Spheres second largest military power, after House Davion. Takashi is ruthless in his vengeance, whole planets have died to appease his honor. The code of Bushido lives on.



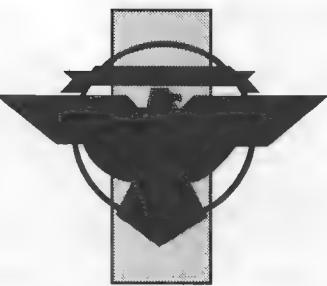
HOUSE STEINER
The Lyran Commonwealth

House Steiner has the strongest economy of the Inner Sphere, but their military has never excelled. Katrina Steiner is its ruler, has a longer vision than other leaders, thus the recent wedding of her daughter to Hanse Davion.



HOUSE LIAO
The Cappallen Confederation

Maxamillion Liao demands and receives an almost fanatical following from his subjects. He has been an active antagonist to House Davion for years, and truly believes he can become the next First Lord of a re-united Star League.



HOUSE MARIK
The Free Worlds League

The Free Worlds League is hampered by infighting of several internal factions. Janos Marik has worked years just to get them all to start talking. What he does not know is that Hanse Davion is behind much of his political problems.

THE WARRIORS

MECHWARRIORS

A BattleMech is controlled by a human pilot who is an elite soldier—a MechWarrior. All MechWarriors and AeroSpace Fighter Pilots fighting in the Succession Wars are professionals, members of a hereditary warrior class. The military families form a small, powerful elite within each of the societies of the Successor States, and they guard their position with jealous vigor.

The children of these families are raised from birth to be MechWarriors. From the time they are old enough to talk, the skills they need are hammered into them: Electronics, Mechanical Engineering, Tactics, and Strategy. The high manual dexterity and hand-eye coordination required are developed by drill, and by constant practice on electronic simulators. Those who do not measure up are shunted aside, to serve as 'Mech technicians, estate managers, or household guards. The best are taught to pilot both BattleMechs and AeroSpace Fighters. They are kept in constant readiness for the day when they will succeed their elders on the battlefield.

Over the centuries, the MechWarrior's families have gathered more and more power. By the beginning of the 31st century, most own large estates which are supported by large numbers of servants. Colonels and captains are correspondingly richer, and regimental commanders often own estates worked by thousands of civilians. In fact, many have been made nobles by the Successor Warlords. In return for their privileges and wealth, the MechWarrior families guarantee protection to their tenants, swear allegiance to their officers, and owe fealty to one of the five Successor Warlords.



MERCENARIES

Though the five Successor States can each field large numbers of regular troops, they also rely heavily on independent mercenary outfits which vary widely in size and quality, but not in motivation.

The Succession Wars era is the ideal setting for mercenary operations. As there are no dramatic causes or sweeping principles of right and wrong among potential employers, mercenaries can offer their combat services to the highest bidder, untroubled by conscience. The even balance of power and the era's social, economic, and political stagnation only add to their sense of security.

Every House has found it necessary to hire mercenary groups. Still, no Successor State is likely to upset the balance of power by winning decisively over the other four (which could put the mercenary on the 'wrong' side and thus end his lucrative career). Furthermore, talented soldiers and military hardware are both in such short supply that mercenaries play a vital role in this age of continuous warfare.

MILITARY ORGANIZATION

During the Succession Wars, BattleMech armies are organized into regiments. Regiments are combined outfits containing heavy, medium, and light BattleMechs, AeroSpace Fighters, and transport Dropships. Occasionally, several BattleMech regiments are combined to form a division, but only for very rare, large operations against heavily defended worlds.

The basic structure of a BattleMech regiment is triangular. That is, it is made up of smaller units in multiples of three. After several hundred years of BattleMech warfare and tactical experimentation, a standard regimental organization has evolved. In practice, few regiments are well-equipped enough to conform exactly to this standard organization, but all units in the Successor States are modeled on it.

A model BattleMech regiment breaks down into the following smaller units: lance, company, battalion, regiment.

LANCE

The smallest BattleMech unit is called a lance. It is the equivalent of a 20th-century tank platoon and contains four BattleMechs of equal weight class. A full-strength lance should have

four 'MechWarriors and four 'Mech technicians, or Techs. Lances are labelled with their commander's name. For example, a BattleMech lance led by Lieutenant Gray is called "Gray's Lance".

COMPANY

Two regular lances and an air lance form a company. Companies are commanded by captains or senior lieutenants. Like lances, they are called by their commander's name. In all, a company contains 12 BattleMechs and 28 MechWarriors.

BATTALION

Three companies make up a battalion. Battalions are commanded by majors or lieutenant colonels, and they are called by their commander's name. Full-strength units contain 36 'Mechs, and 72 MechWarriors.

REGIMENT

Three Battalions plus a Dropship transport section form a BattleMech regiment. Every regiment is commanded by colonel and contains 108 'Mechs, 18 fighters, and 252 men.

Regiments are known by either a traditional title or by their colonel's name, for example "The 15th Crucis Hussars" or "Yamashita's Regiment". The transport section contains enough Dropships to carry the entire regiment in one lift.

There are three different Dropship classes. The smallest, the *Leopard* class, can carry a lance or an air lance of four 'Mechs and up to two aerospace fighters. *Union* class ships can carry twelve 'Mechs and up to two fighters. *Overlord* class ships can transport a full battalion of 36 BattleMechs and six fighters. Most regimental commanders prefer a mix of different Dropships in their transport section, believing that it adds flexibility and survivability. Dropships are armed, but they also rely on AeroSpace fighters for protection in space and in the air, and on BattleMechs while they are on the ground.

Tanks and lightly armed vehicles also can be found on the battlefields. Though they are technically primitive when compared to BattleMechs, they are the most advanced weapons that many worlds in the Successor States can manufacture. Tank and infantry are used as garrisons on planets throughout the Human Sphere.

THE BATTLEMECHS

Every BattleMech is built around a man-like "skeleton" made up of several dozen composite "bones". Each "bone" contains a honeycombed, foamed-aluminum core wrapped with stressed silicon-carbide monofilament and protected by a rigid, titanium steel shell. Every strong, ultra-light artificial bone provides attachment points needed for the "muscles" and other servos that actually drive the BattleMech. Their skeletal construction helps make BattleMechs less vulnerable and easier to repair than vehicles built with a stressed-skin shell.

BattleMechs use two different systems to drive and control their movements. Light weapons and sensor arrays are propelled by small, electrically-driven rotary or linear actuators. Larger movements involving the limbs and main weapons are controlled by bundles of polyacetylene fibers called myomers. The fiber bundles contract strongly under the influence of electricity, duplicating the operation of human muscle tissue, though obviously on a much larger scale. Battlefield repairs to damaged limbs can easily be made by either replacing the fiber bundles or by transferring bundles from other parts of the 'Mech's skeleton. Transferred fiber bundles

cannot restore full function to a damaged limb, but they can give it back limited mobility and strength.

'Mechs are protected by two separate layers of armor. An outer layer of aligned-crystal steel with good heat conductivity provides protection from lasers and particle beam weapons. It is also rigid and tough enough to stop almost any conventional projectile. An inner layer of boron nitride impregnated with diamond monofilament stops high-explosive armor-piercing (HEAP) rounds and fast neutrons. This second layer of armor also stops armor fragments from spewing into the BattleMech's interior. Both layers of armor are only a few inches thick.

These armored giants require tremendous amounts of energy for movement and combat; and a fusion reactor provides virtually unlimited power, enough so that BattleMechs can be adapted to fight in environments ranging from sun-baked deserts to sub-zero arctic ice fields. The fusion reaction does not release neutrons, so the power plant can be run indefinitely without becoming radioactive.

Heat retention is always a serious problem, as even moderate internal temperatures can

disrupt the magnetic containment fields around the reactors, thus damaging such vital systems as the 'Mech's targeting computers. If a power plant's magnetic "jar" is disrupted, fusion reactions that do release neutrons could occur, causing serious radiation damage to both the internal systems and the crew.

Depending on their size and weight, BattleMechs can reach walking or running speeds ranging from 40 to 150 kilometers per hour in open terrain. Dense forests, swamps, and steep slopes will slow them down, but very few terrain features can stop them.

In addition to their sophisticated movement control systems, BattleMechs need computers to help handle a wide variety of sensor information and weapons systems. In most 'Mechs, these secondary systems are comparatively simple data processors constructed with currently available technology.

These armed titans rely on a number of different sensors for information, including light-intensifier optics and laser range-finding systems.

BattleMechs usually carry charged particle beam weapons or lasers as their main arma-

THE BATTLEMECHS

ment. Energy weapons are preferred because they can be powered almost indefinitely by the on-board fusion reactor. In addition, many carry launching racks for short- or long-range, non-nuclear missiles. Some 'Mechs are even equipped with rapid-fire autocannons or machine guns for use against infantry, aircraft, and other BattleMechs.

A sealed environment crew compartment complete with chemical atmosphere regenerators, food, water, and other supplies can sustain the pilot and a single passenger for up to a week. Both positions in the crew compartment are equipped with ejection seats. If a BattleMech takes catastrophic damage, its pilot and any passenger can blow open the back of its head and eject out.

BattleMechs engaged in combat generate a lot of waste heat in a very short period of time. Their power plants, movement, and energy weapons all produce heat that must be eliminated. 'Mechs can be seriously damaged, and even crippled by high internal temperatures. High temperatures can disrupt the fusion reactor's magnetic containment shields and release hard radiation, killing the crew and crip-

pling its onboard computers. In addition, the 'Mech's electronics and computer systems are temperature-sensitive. High heat can damage them, slowing the 'Mech's movement and reducing the accuracy of its weapons.

BattleMechs control their internal tempera-

tures by giving off waste heat and by strictly regulating the rate at which they move and fire. All 'Mechs are equipped with radiators to help dissipate heat. The heat pouring out of these radiators gives each machine an enormous IR (infrared) signature.

Each weapon is rated for how much damage it does ("R" indicates that damage is random depending on how many missiles actually hit), how much heat it creates, how long it takes to recharge or reload (in seconds), and its maximum range.

Name	Abr.	Damage	Heat	Reload	Max. Range
Machine Guns	M.G.	2	0	0	400 meters
Small Laser	S. LSR	3	1.1	1	300 meters
Medium Laser	M. LSR	5	3.3	4	600 meters
Large Laser	L. LSR	8	8.8	6	900 meters
Particle Projection Cannon	P.P.C.	10	11.0	8	1000 meters
Short Range Missiles 2 Pack	S.R.M. 02	2-4R	2.2	2	600 meters
Short Range Missiles 4 Pack	S.R.M. 04	2-8R	3.3	3	600 meters
Short Range Missiles 6 Pack	S.R.M. 06	2-12R	4.4	4	600 meters
Auto Fire Cannon 10mm	A.F.C. 10	2	1.1	3	1500 meters
Auto Fire Cannon 25mm	A.F.C. 25	5	1.1	4	1200 meters
Auto Fire Cannon 50mm	A.F.C. 50	10	3.3	6	900 meters
Auto Fire Cannon 100mm	A.F.C. 100	20	7.7	10	600 meters
Long Range Missile 05 Pack	L.R.M. 05	1-05R	2.2	2	6 Kilometers
Long Range Missile 10 Pack	L.R.M. 10	1-10R	4.4	5	6 Kilometers
Long Range Missile 15 Pack	L.R.M. 15	1-15R	5.5	7.5	6 Kilometers
Long Range Missile 20 Pack	L.R.M. 20	1-20R	6.6	10	6 Kilometers

THE LOKI HEAVY MECH

The Loki BattleMechs are very heavily armed and armored, but are relatively slow. They concentrate on energy weapons that deliver an enormous amount of damage, but are designed for close in combat. The Loki's armor is designed for good coverage all around, it's back armor is the heaviest of any of the 'Mechs. The Loki will dissipate 2 points of heat a second (2p/s), some versions add additional heat sinks.

Loki Prim. (Primary Version)

Top Speed: 97 Kph

Number of Weapons:

2	A.F.C. 50mm
1	S.R.M. 6 pack
2	Medium Lasers
2	Small Lasers
2	Machine Guns

Loki V1 (Variant 1)

Top Speed: 97 Kph

Number of Weapons:

1	A.F.C. 100mm
1	S.R.M. 2 pack
1	P.P.C.
1	Large Laser
3	Medium Lasers
2	Small Lasers
2	Machine Guns

Loki V2 (Variant 2)

Top Speed: 118 Kph

Number of Weapons:

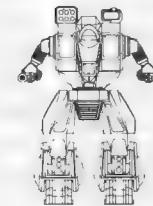
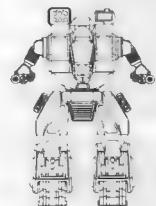
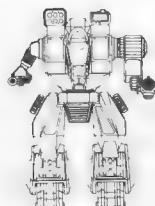
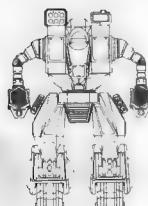
2	P.P.C.
1	S.R.M. 6 pack
2	Large Lasers
2	Medium Lasers
3	Extra Heat Sinks (Dissipates .6 p/s)

Loki V3 (Variant 3)

Top Speed: 64 Kph

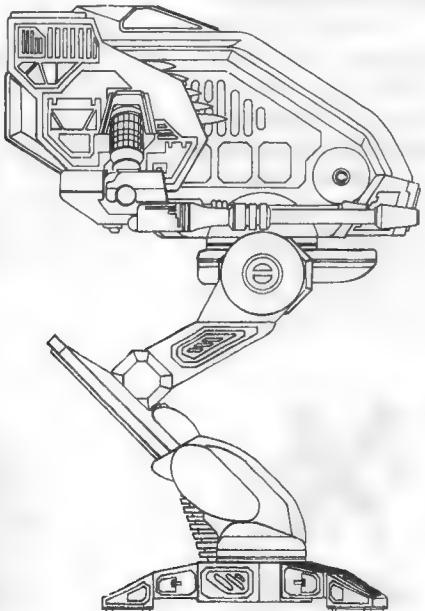
Number of Weapons:

4	P.P.C.
1	S.R.M. 6 pack
2	Medium Lasers
2	Small Lasers
2	Machine Guns
6	Extra Heat Sinks (Dissipates 1.2 p/s)



THE VULTURE HEAVY MECH

The Vultures were designed to look mean, and they do. These great, carnivorous birds of the battlefield are fast and deadly. Packing lots of long-range missiles, they are very effective at long distance. Don't make the mistake of assuming they can't fight close in. Vultures have several lasers to do the job. The Vulture's armor is spread a little thinner then the Loki's, but its speed makes up for it. The Vulture dissipates 2 points of heat a second (2p/s).



Vulture Prim (Primary Version)

Top Speed: 97 Kph

Number of Weapons
2 LRM 20-packs
2 Large Lasers
2 Medium Lasers
2 Small Lasers

Vulture V1 (Variant 1)

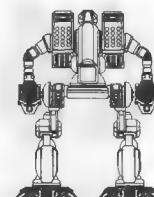
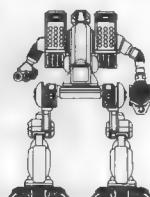
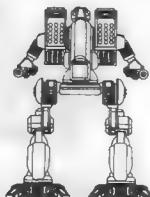
Top Speed: 118 Kph

Number of Weapons
2 LRM 15-packs
2 Large Lasers
2 Medium Lasers
2 Small Lasers
2 Machine Guns

Vulture V2 (Variant 2)

Top Speed: 129 Kph

Number of Weapons
2 LRM 10-packs
2 Large Lasers
2 Medium Lasers
2 Small Lasers
2 Machine Guns



THE MADCAT HEAVY MECH

The MadCat got it's name from the two older 'Mechs that it's design came from, the Catapult and the Marauder. It is the most balanced of the 'Mech designs, not favoring speed, long range or short range weapons, but creating a 'Mech that can accomplish all three. The MadCats armor is spread like the Vultures and it also dissipates 2 points of heat a second (2p/s).

MadCat Prim. (Primary Version)

Top Speed: 97 Kph

Number of Weapons:
2 L.R.M. 15 packs
1 P.P.C.
2 Large Lasers
2 Medium Lasers

MadCat V1 (Variant 1)

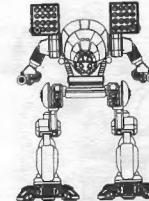
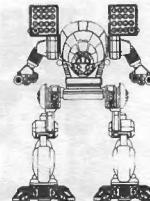
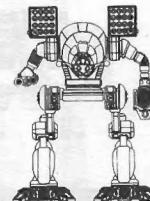
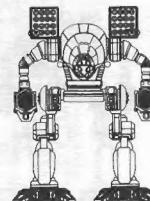
Top Speed: 97 Kph
Number of Weapons:
2 L.R.M. 10 packs
1 A.F.C. 50mm
1 Large Lasers
2 Medium Lasers
2 Small Lasers
2 Machine Guns

MadCat V2 (Variant 2)

Top Speed: 118 Kph
Number of Weapons:
2 L.R.M. 15 packs
2 Large Lasers
2 Medium Lasers
2 Small Lasers
2 Machine Guns

MadCat V3 (Variant 3)

Top Speed: 151 Kph
Number of Weapons:
2 L.R.M. 10 packs
4 Medium Lasers
2 Small Lasers
2 Machine Guns



THE THOR HEAVY MECH

The unique asymmetrical design of the Thor lends itself to more variants then any other design. Because of it's versatility an opponent must carefully study the Thor's configuration or get a deadly surprise. The Thor's armor is like the Loki's but is slightly thinner in the back. The Thor will dissipate 2 points of heat a second (2p/s), some versions add additional heat sinks.

Thor Prim. (Primary Version)

Top Speed: 97 Kph

Number of Weapons:
1 L.R.M. 10 pack
2 A.F.C. 25mm
2 Large Lasers
4 Small Lasers

Thor V1 (Variant 1)

Top Speed: 97 Kph

Number of Weapons:
1 A.F.C. 100mm
1 S.R.M. 6 pack
2 Large Lasers
2 Medium Lasers
2 Small Lasers
2 Machine Guns

Thor V2 (Variant 2)

Top Speed: 86 Kph

Number of Weapons:
1 L.R.M. 10 pack
1 P.P.C.
1 A.F.C. 100mm
2 Medium Lasers
1 Small Laser
1 Machine Gun

Thor V3 (Variant 3)

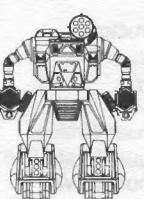
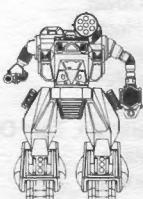
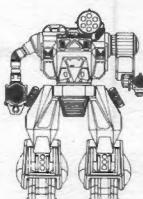
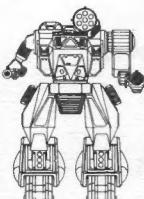
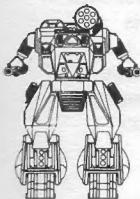
Top Speed: 118 Kph

Number of Weapons:
1 L.R.M. 20 pack
1 P.P.C.
1 Large Laser
3 Medium Lasers
2 Small Lasers
2 Machine Guns
3 Extra Heat Sinks
(Dissipates .6 p/s)

Thor V4 (Variant 4)

Top Speed: 129 Kph

Number of Weapons:
1 S.R.M. 6 pack
1 P.P.C.
2 Large Lasers
2 Medium Lasers
4 Small Lasers
3 Extra Heat Sinks
(Dissipates .6 p/s)



BATTLETECH CENTER

CREDITS

Computer Hardware and Software:

General Contractors:

Cockpit and Store Design:

Hardware & Software designed for ESP by: Incredibe Technologies

Industrial Design:

Environmental Simulations Project Inc.

Fritkin & Jones Design Group

Herbst Lazar Bell Inc.

Graphics Design:

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Jordan Weisman

L. Ross Babcock III

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Jeff Laubenstein

Duane Loose

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946



91



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